



Autonomous Vehicle Project

“Welcome to the future”

Along with the definitions, the seven requirements below created the foundation for the regulations.

Section 2:

- **Establish a driver's license endorsement** for the operation of an autonomous vehicle. The endorsement must recognize that a person is not required to actively drive an autonomous vehicle.

Section 8:

- **Set forth requirements** that an autonomous vehicle must meet before it may be operated on a highway within this State;
- Set forth **requirements for the insurance** that is required to test or operate an autonomous vehicle on a highway within this State;
- Establish **minimum safety standards** for autonomous vehicles and their operation;
- **Provide for the testing** of autonomous vehicles;
- **Restrict the testing** of autonomous vehicles to specified geographic areas; and
- Set forth such **other requirements** as the Department determines to be necessary.

Assembly Bill 511 - Requirements

- Nevada had 5 months to acquire as much information on autonomous vehicles as possible, create a network of stakeholders, draft language, and conduct public hearings.
- The Federal Government had no safety standards for autonomous vehicles, so Nevada was starting from scratch.
- Assembly Bill 511 required the Department to create and have regulations adopted by March 01, 2012.



“Little time and a lot to learn”

List of stakeholders Nevada worked with during the regulatory process:

- **Nevada Highway Patrol**
- **Nevada Department of Business & Industry – Insurance Division**
- **Nevada Department of Transportation**
- **National Highway Traffic Safety Administration (NHTSA)**
- **Nevada Attorney Generals Office**
- **State Farm Insurance**
- **American Family Mutual Insurance Company – Allstate & AAA Insurance**
- **Travelers Insurance**
- **Reno Police Department**
- **Carson City Sheriffs Office**
- **Washoe County Sheriffs Office**
- **Stanford University – CARS Program**
- **Nevada Automotive Test Center**
- **The Alliance of Automobile Manufacturers**
- **Property/Casualty Insurers Association of America**
- **Google Corporation**
- **Association of Global Automakers**
- **Several vehicle manufactures and auto parts makers BMW, Hyundai, Bosch, Volkswagen, Nissan, Honda, DENSO, General Motors, Ford, Toyota, Subaru**

“Autonomous Stakeholders”

A list of the major “hot” topics the State dealt with when creating the regulations:

- **Defining “autonomous vehicle”;**
 - (Further clarifying the definition in AB511 for the auto manufacturers.)
- **Electronic Data Recorder;**
 - (30-second record prior to impact requirement; separate from federal EDR system)
- **Auto Manufacturer Liability** (*Topic only – not incorporated into the regulations*) ;
 - (Auto manufacturers concerned about “after market” companies installing this technology on their vehicles and the liability. Nevada did not implement their suggested language since this would be handled through the criminal justice process in place today.)
- **Testing standards of autonomous vehicles on our highways; and**
 - (Establish State requirements before a company can apply for a test license in Nevada; safety; what and how the Department would test these various technologies; internal processes; etc...)
- **Certification of Compliance**
 - (Requiring after market and auto manufacturers to certify the capabilities and limitation of the vehicle when a customer purchases this technology.)

Challenges

On **February 15, 2012** the Regulatory Commission approved the regulations without question, and Nevada became the first State to adopt regulations for autonomous vehicles.

- Nevada's Autonomous Test plates



- Registration plates



Where are we today?

April 10, 2012: *Google* applied for a license to test autonomous vehicles in Nevada.

What is needed:

- ✓ Proof of 10,000 miles of autonomous operation
- ✓ A description of the autonomous technology
- ✓ Safety plan
- ✓ Vehicle operator training plan
- ✓ Surety bond 1million or more



Where are we today?

May 1, 2012: The drive demonstration was conducted in Las Vegas. The vehicle was not distracted by things downtown like we would be!



Where are we today?

May 3, 2012: Testing license approved for Google



Where are we today?

September 10, 2012:

The Department began issuing the new “G” driver’s license endorsement and is ready to register vehicles to consumers when the technology is available.



Where are we today?



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